

10/735,582 01 October 2006 Primary Examiner Dell Chism

FILE 'HOME' ENTERED AT 00:16:49 ON 02 OCT 2006

=> b reg  
COST IN U.S. DOLLARS  
FULL ESTIMATED COST  
SINCE FILE ENTRY  
TOTAL SESSION  
0.63 0.63

FILE 'REGISTRY' ENTERED AT 00:18:50 ON 02 OCT 2006  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 29 SEP 2006 HIGHEST RN 909185-74-6  
DICTIONARY FILE UPDATES: 29 SEP 2006 HIGHEST RN 909185-74-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JUNE 30, 2006

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> b caplus biosis sciseach medline emabal embase  
'SCISEACH' IS NOT A VALID FILE NAME  
Enter "HELP FILE NAMES" at an arrow prompt (=) for a list of files  
that are available. If you have requested multiple files, you can  
specify a corrected file name or you can enter "IGNORE" to continue  
accessing the remaining file names entered.  
ENTER A FILE NAME OR (IGNORE): sciseach  
'EMABAL' IS NOT A VALID FILE NAME  
Enter "HELP FILE NAMES" at an arrow prompt (=) for a list of files  
that are available. If you have requested multiple files, you can  
specify a corrected file name or you can enter "IGNORE" to continue  
accessing the remaining file names entered.  
ENTER A FILE NAME OR (IGNORE): emabal

COST IN U.S. DOLLARS  
SINCE FILE ENTRY  
TOTAL SESSION  
0.44 1.07

FILE 'CAPLUS' ENTERED AT 00:19:43 ON 02 OCT 2006  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOSIS' ENTERED AT 00:19:43 ON 02 OCT 2006  
Copyright (c) 2006 The Thomson Corporation

FILE 'SCISEARCH' ENTERED AT 00:19:43 ON 02 OCT 2006

Allowance Search

10/735,582 01 October 2006 Primary Examiner Dell Chism

Copyright (c) 2006 The Thomson Corporation

FILE 'MEDLINE' ENTERED AT 00:19:43 ON 02 OCT 2006

FILE 'EMBAL' ENTERED AT 00:19:43 ON 02 OCT 2006  
Copyright (c) 2006 Elsevier B.V. All rights reserved.

FILE 'EMBASE' ENTERED AT 00:19:43 ON 02 OCT 2006  
Copyright (c) 2006 Elsevier B.V. All rights reserved.

=> s isoleucyl adj thiazolidine  
L1 0 ISOLEUCYL ADJ THIAZOLIDINE

=> s isoleucyl thiazolidine  
L2 15 ISOLEUCYL THIAZOLIDINE

=> s isoleucyl pyrrolidine  
L3 2 ISOLEUCYL PYRROLIDINE

=> s allo isoleucyl thiazolidine  
L4 0 ALLO ISOLEUCYL THIAZOLIDINE

=> s allo isoleucyl pyrrolidine  
L5 0 ALLO ISOLEUCYL PYRROLIDINE

=> s valyl thiazolidine  
L6 0 VALYL THIAZOLIDINE

=> s valyl pyrrolidine  
L7 11 VALYL PYRROLIDINE

=> s l2 l3 l7

MISSING OPERATOR L2 L3  
The search profile that was entered contains terms or  
nested terms that are not separated by a logical operator.

=> s l2 and l3 and l7  
L8 0 L2 AND L3 AND L7

=> s l2 and dipeptidyl peptidase and inhibitor  
L9 15 L2 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR

=> s l3 and dipeptidyl peptidase and inhibitor  
L10 0 L3 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR

=> s l7 and dipeptidyl peptidase and inhibitor  
L11 0 L7 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR

=> dup remo l9

PROCESSING COMPLETED FOR L9  
L12 8 DUP REMO L9 (7 DUPLICATES REMOVED)

=> d l12 1-8 bib abs

L12 ANSWER 1 OF 8 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights  
reserved on STN

AN 2005446499 EMBASE

TI Dipeptidyl peptidase IV inhibition for the treatment  
of type 2 diabetes: Potential importance of selectivity over

Allowance Search

diipeptidyl peptidases 8 and 9.  
 AU Lankas G.R.; Leitling B.; Roy R.S.; Eiermann G.J.; Beconi M.G.; Biftu T.; Chan C.-C.; Edmondson S.; Feeney W.P.; He H.; Ippolito D.E.; Kim D.; Lyons K.A.; Ok H.O.; Patel R.A.; Petrov A.N.; Pryor K.A.; Qian X.; Reigle L.; Woods A.; Wu J.K.; Zaller D.; Zhang X.; Zhu L.; Weber A.E.; Thornberry N.A.

CS N.A. Thornberry, Merck Research Laboratories, E. Lincoln Avenue, Rahway, NJ, United States. nancy.thornberry@merck.com  
 SO Diabetes, (2005) Vol. 54, No. 10, pp. 2988-2994.

Refs: 30  
 ISSN: 0012-1797 CODEN: DIAE2Z

United States  
 DT Journal; Article

FS 003 Endocrinology

029 Clinical Biochemistry

030 Pharmacology

037 Drug Literature Index

052 Toxicology

LA English

SL Entered STN: 17 Nov 2005

ED Last Updated on STN: 17 Nov 2005

AB Diipeptidyl peptidase (DPP)-IV inhibitors are

a family of serine peptidases that includes quiescent cell proline diipeptidase (OPP), DPP8, and DPP9; DPP-IV is a key regulator of incretin hormones, but the functions of other family members are unknown. To determine the importance of selective DPP-IV inhibition for the treatment of diabetes, we tested selective inhibitors of DPP-IV.

DPP8/DPP9, or OPP in 2-week rat toxicity studies and in acute dog tolerability studies. In rats, the DPP8/9 inhibitor produced alopecia, thrombocytopenia, reticulocytopenia, enlarged spleen, multiorgan histopathological changes, and mortality. In dogs, the DPP8/9 inhibitor produced gastrointestinal toxicity. The OPP inhibitor produced reticulocytopenia in rats only, and no toxicities were noted in either species for the selective DPP-IV inhibitor. The DPP8/9 inhibitor was also shown to attenuate T-cell activation in human in vitro models; a selective DPP-IV inhibitor was inactive in these assays. Moreover, we found DPP-IV inhibitors that were previously reported to be active in models of immune function to be more potent inhibitors of DPP8/9. These results suggest that assessment of selectivity of potential clinical candidates may be important to an optimal safety profile for this new class of antihyperglycemic agents. .COPYRG. 2005 by the American Diabetes Association.

L12 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1

AN 2005:681597 CAPLUS

DT 143:186086

TI Type 2 diabetes-Therapy with diipeptidyl peptidase IV inhibitors

AU Demuth, Hans-Ulrich; McIntosh, Christopher H. S.; Pederson, Raymond A.

CS Biocenter, Probiolog AG, Halle (Saale), D-06120, Germany

SO Biochimica et Biophysica Acta, Proteins and Proteomics (2005), 1751(1), 33-44

CODEN: BBAPBM, ISSN: 1570-9639

PB Elsevier B.V.

DT Journal; General Review

LA English

Allowance Search

AB A review. The sole application of an inhibitor of the diipeptidyl peptidase DP IV (also DP 4, CD26, DPP-IV or DPP-4) to a mammal subsequently leading to improved glucose tolerance marks a major breakthrough in metabolic research bearing the potential of a new revolutionary diabetes therapy. This was demonstrated in rat applying the specific DP IV inhibitor isoleucyl thiazolidine. It was published in 1996 for the first time that a specific DP IV inhibitor in a given dose was able to completely block glucagon-like peptide-1 (GLP-1) degradation in vivo resulting in improved insulin response accompanied, by accelerated peripheral glucose disposal. Later on, these results were confirmed by several research teams applying DP IV inhibitors i.v. or orally. Today, the DP IV inhibition for the treatment of metabolic disorders is a validated principle. Now, more than 10 years after the initial animal expts., first DP IV inhibitors as investigational drugs are tested in phase 3 clin. trials.

RE.CNT 78 THERE ARE 78 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 8 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN

AN 2004386015 EMBASE

TI CD26

AU Chen T.; Smyth D.; Abbott C.A.

CS Dr. C. Abbott, School of Biological Sciences, Flinders University, PO Box 2100, Adelaide, SA 5001, Australia. cathy.abbott@flinders.edu.au

SO Journal of Biological Regulators and Homeostatic Agents, (2004) Vol. 18, No. 1, pp. 47-54.

Refs: 67

ISSN: 0393-974X CODEN: JBRAER

CY Italy

DT Journal; Article

FS 006 Internal Medicine

026 Immunology, Serology and Transplantation

029 Clinical Biochemistry

030 Pharmacology

037 Drug Literature Index

038 Adverse Reactions Titles

LA English

ED Entered STN: 24 Sep 2004

Last Updated on STN: 24 Sep 2004

DATA NOT AVAILABLE FOR THIS ACCESSION NUMBER

L12 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:187761 CAPLUS

DN 139:206999

TI Inhibitor focusing: Direct selection of drug targets from proteomes using activity-based probes

AU Nomanbhoy, Tyzoon K.; Rosenblum, Jonathan; Aban, Arwin; Burbaum, Jonathan J.

CS ActivX Biosciences, Inc., La Jolla, CA, 92037, USA

SO Assay and Drug Development Technologies (2003), 1(1-2), 137-146

CODEN: ADSTAR, ISSN: 1540-658X

PB Mary Ann Liebert, Inc.

DT Journal

LA English

AB In the latter stages of drug discovery and development, assays that establish drug selectivity and toxicity are important when side effects, which are often due to lack of specificity, determine drug candidate viability.

Allowance Search

There has been no comprehensive or systematic methodol. to measure these factors outside of whole-animal assays, and such phenomol. assays generally fail to establish the addnl. targets of a given small mol., or the mol. origin of toxicity. Consequently, small-mol. development programs destined for failure often reach advanced stages of testing, and the money and time invested in such programs could be saved if information on selectivity were available early in the process. Here, we present a methodol. that utilizes chemical ABPs in combination with small-mol. inhibitors to selectively label small-mol. binding sites in whole proteomic samples. In principle, the ABP and small mol. will compete for similar binding sites, such that the small mol. will protect against modification by the ABP. Thus, after removal of the small mol., the binding site for the ABP will be revealed, and a second probe can then be used to label the small-mol. binding sites selectively. To demonstrate this exptl., we mapped the binding sites of the dipeptidyl peptidase 4 inhibitor, isoleucyl thiazolidine, in a number of different tissue types.

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 8 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
AN 2002:6029 BIOSIS  
DN PREV200200006029  
TI Use of dipeptidyl peptidase IV effectors for lowering  
the blood glucose level in mammals.  
AU Demuth, Hans-Ulrich [inventor]; Rosche, Fred [inventor];  
Schmidt, Joem [inventor]; Pauly, Robert P. [inventor]; McIntosh,  
Christopher H. S. [inventor]; Pederson, Ray A. [inventor];  
Halle, Germany  
CS  
ASSIGNEE: Probiolog, Weinbergweg, Germany  
PI US 6303661 20011016  
SO Official Gazette of the United States Patent and Trademark Office Patents,  
(Oct. 16, 2001) Vol. 1251, No. 3. e-file.  
CODEN: OGPUPE7. ISSN: 0098-1133.

DT Patent  
LA English  
ED Entered STN: 28 Dec 2001  
AB Novel therapeutic regimens are provided which comprise the administration of therapeutically effective amounts of an inhibitor to dipeptidyl peptidase (DP-IV) or enzymes of similar activity whereby their ability to degrade the incretins, GLP-1 and GIP, is reduced. As a result hyperglycemia, such as that accompanying food intake may be reduced due to improved insulin release. A preferred therapeutic regimen amongst a number of routes of administration and inhibitors that may be used comprises the oral administration of isoleucyl thiazolidine.

L12 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 2  
AN 2000:853951 CAPLUS  
DN 134:95720  
TI Metabolism of glucagon by dipeptidyl peptidase IV (CD26)

AU Pospisilik, J. A.; Hinke, S. A.; Pederson, R. A.; Hoffmann, T.; Rosche, F.; Schlenzig, D.; Glund, K.; Heiser, U.; McIntosh, C. H. S.; Demuth, H.-U.  
CS Department of Physiology, University of British Columbia, Vancouver, BC, V6T 1Z3, Can.  
SO Regulatory Peptides (2001), 96(3), 133-141

Allowance Search

CODEN: REPPDY; ISSN: 0167-0115  
Elsevier Science Ireland Ltd.  
DT Journal  
LA English

AB Glucagon is a 29-amino acid polypeptide released from pancreatic islet  $\alpha$ -cells that acts to maintain euglycemia by stimulating hepatic glycogenolysis and gluconeogenesis. Despite its importance, there remains controversy about the mechanisms responsible for glucagon clearance in the body. In the current study, enzymic metabolism of glucagon was assessed using sensitive mass spectrometric techniques to identify the mol. products. Incubation of glucagon with purified porcine dipeptidyl peptidase IV (DP IV) yielded sequential production of glucagon3-29 and glucagon5-29. In human serum, degradation to glucagon3-29 was rapidly followed by N-terminal cyclization of glucagon, preventing further DP IV-mediated hydrolysis. Bioassay of glucagon, following incubation with purified DP IV or normal rat serum demonstrated a significant loss of hyperglycemic activity, while a similar incubation in DP IV-deficient rat serum did not show any loss of glucagon bioactivity. Degradation, monitored by mass spectrometry and bioassay, was blocked by the specific DP IV inhibitor, isoleucyl thiazolidine. These results identify DP IV as a primary enzyme involved in the degradation and inactivation of glucagon. These findings have important implications for the determination of glucagon levels in human plasma.

RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 7 OF 8 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
AN 2001:2379 BIOSIS  
DN PREV200100002379  
TI Prodrugs of DP IV-inhibitors strongly improve incretin-mediated glucose tolerance.  
AU Demuth, Hans-Ulrich [reprint author]; Hoffmann, Torsten; Freyae, Ernst-Joachim; Berg, Sabine; Heinke, Peter; McIntosh, Christopher H. S.; Pederson, Raymond A.  
CS Probiolog Research GmbH, Halle/Saale, Germany  
SO Diabetes Research and Clinical Practice, (September, 2000) Vol. 50, No. Suppl. 1, pp. S386. print.  
Meeting Info.: 17th International Diabetes Federation Congress on Diabetes Research and Clinical Practice, Mexico-City, Mexico, November 05-10, 2000. International Diabetes Federation.  
CODEN: DRCPPE9. ISSN: 0168-8227.

DT Conference; (Meeting)  
LA English  
ED Entered STN: 21 Dec 2000  
Last Updated on STN: 21 Dec 2000

L12 ANSWER 8 OF 8 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN  
AN 2000416531 EMBASE  
TI Metabolism of glucagon by dipeptidyl peptidase IV (CD26).

AU Pospisilik, J. A.; Hinke, S. A.; Pederson, R. A.; Hoffmann, T.; Rosche, F.; Schlenzig, D.; Glund, K.; Heiser, U.; McIntosh, C.H.S.; Demuth, H.U.  
CS H.U. Demuth, Probiolog Research, Biocenter, Weinbergweg 22, D-06120 Halle, Germany. hans-ulrich.demuth@probiolog.de  
SO Regulatory Peptides, (12 Jan 2001) Vol. 96, No. 3, pp. 133-141.  
Refs: 49  
ISSN: 0167-0115 CODEN: REPPDY

Allowance Search

10/735,582 01 October 2006 Primary Examiner Dell Chism

PUI S 0167-0115(00)00170-1

CY Netherlands

DT Journal; Article

FS 003 Endocrinology

030 Pharmacology

037 Drug Literature Index

LA English

SL English

ED Entered STN: 14 Dec 2000

Last Updated on STN: 14 Dec 2000

AB Glucagon is a 29-amino acid polypeptide released from pancreatic islet  $\alpha$ -cells that acts to maintain euglycemia by stimulating hepatic glycogenolysis and gluconeogenesis. Despite its importance, there remains controversy about the mechanisms responsible for glucagon clearance in the body. In the current study, enzymatic metabolism of glucagon was assessed using sensitive mass spectrometric techniques to identify the molecular products. Incubation of glucagon with purified porcine dipeptidyl peptidase IV (DP IV) yielded sequential production of glucagon3-29 and glucagon5-29. In human serum, degradation to glucagon3-29 was rapidly followed by N-terminal cyclization of glucagon, preventing further DP IV-mediated hydrolysis. Bioassay of glucagon, following incubation with purified DP IV or normal rat serum demonstrated a significant loss of hyperglycemic activity, while a similar incubation in DP IV-deficient rat serum did not show any loss of glucagon bioactivity. Degradation, monitored by mass spectrometry and bioassay, was blocked by the specific DP IV inhibitor, isoleucyl thiazolidine. These results identify DP IV as a primary enzyme involved in the degradation and inactivation of glucagon. These findings have important implications for the determination of glucagon levels in human plasma. Copyright (C) 2001 Elsevier Science B.V.

=> d his

(FILE 'HOME' ENTERED AT 00:16:49 ON 02 OCT 2006)

FILE 'REGISTRY' ENTERED AT 00:18:50 ON 02 OCT 2006

FILE 'CAPLUS, BIOSIS, SCISEARCH, MEDLINE, EMBAL, EMBASE' ENTERED AT 00:19:43 ON 02 OCT 2006

L1 0 S ISOLEUCYL ADJ THIAZOLIDINE  
L2 15 S ISOLEUCYL THIAZOLIDINE  
L3 2 S ISOLEUCYL PYRROLIDINE  
L4 0 S ALLO ISOLEUCYL THIAZOLIDINE  
L5 0 S ALLO ISOLEUCYL PYRROLIDINE  
L6 0 S VALYL THIAZOLIDINE  
L7 11 S VALYL PYRROLIDINE  
L8 0 S L2 AND L3 AND L7  
L9 15 S L2 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR  
L10 0 S L3 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR  
L11 0 S L7 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR  
L12 8 DUP REMO L9 (7 DUPLICATES REMOVED)

=> b pctfull uspatfull uspat2

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY 82.00 SESSION 83.07

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL

Allowance Search

10/735,582 01 October 2006 Primary Examiner Dell Chism

CA SUBSCRIBER PRICE

ENTRY -2.25

SSSSION -2.25

FILE 'PCTFULL' ENTERED AT 00:25:18 ON 02 OCT 2006  
COPYRIGHT (C) 2006 Univento

FILE 'USPATFULL' ENTERED AT 00:25:18 ON 02 OCT 2006  
CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 00:25:18 ON 02 OCT 2006  
CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

=> s L2

L13 80 L2

=> s L3

L14 79 L3

=> s L7

L15 44 L7

=> s L13 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR  
L16 74 L13 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR

=> s L14 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR  
L17 71 L14 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR

=> s L15 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR  
L18 17 L15 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR

=> dup remo L16

PROCESSING COMPLETED FOR L16

L19 69 DUP REMO L16 (5 DUPLICATES REMOVED)

=> dup remo L17

PROCESSING COMPLETED FOR L17

L20 65 DUP REMO L17 (6 DUPLICATES REMOVED)

=> dup remo L18

PROCESSING COMPLETED FOR L18

L21 16 DUP REMO L18 (1 DUPLICATE REMOVED)

=> s L19 AND L20 AND L21

L22 6 L19 AND L20 AND L21

=> d L22 1-6 bib abs

L22 ANSWER 1 OF 6 PCTFULL COPYRIGHT 2006 Univento on STN

AN 2004076433 PCTFULL ED 20040916 EW 200437

TIEN DIPEPTIDYL PEPTIDASE INHIBITORS

TIFR INHIBITEURS DE DIPEPTIDYLE PEPTIDASE

IN SCHARPE, Simon, Kerkhofstraat 7, B-9280 Wieze, BE [BE, BE];

AUGUSTYN, Koen, Heike 2, B-2322 Hoogstraten, BE [BE, BE];

HAEMERS, Achiel, De Knok 2, B-9830 Sint-Martens-Latem, BE [BE, BE];

LAMBEIR, Anne-Marie, Sparrendreef 35, B-3001 Heverlee, BE [BE, BE];

DE WEESTER, Ingrid, Fort 7-straat 7, B-2610 Wilrijk, BE [BE, BE];

SENTEN, Kristel, Ringlaan 86, B-2610 Wilrijk, BE [BE, BE];

VAN DER VEKEN, Pieter, Broevink 61, B-1745 Opwijk, BE [BE, BE];

PA AIC, Drie Eikenstraat 661, B-2650 Edgem, BE [BE, BE], for all

Allowance Search

designates States except US:  
 SCHARPE, Simon, Kerkhofstraat 7, B-9280 Wize, BE [BE, BE], for US only;  
 AUGUSTYNS, Koen, Heike 2, B-2322 Hoogstraten, BE [BE, BE], for US only;  
 HAEMERS, Achiel, De Kook 2, B-9830 Sint-Martens-Latem, BE [BE, BE], for  
 US only;  
 LAMBEIR, Anne-Marie, Sparrendreef 35, B-3001 Heverlee, BE [BE, BE], for  
 US only;  
 DE MESIER, Ingrid, Fort 7-straat 7, B-2610 Wilrijk, BE [BE, BE], for US  
 only;  
 SENTEN, Kristel, Ringlaan 86, B-2610 Wilrijk, BE [BE, BE], for US only;  
 VAN DER VEKEN, Pieter, Broevink 61, B-1745 Opwijk, BE [BE, BE], for US  
 only;  
 BRANTS, Johan, Philippe, Emi, De Clercq, Brants & Partners cv, E.  
 Gevaertdreef 10a, B-9830 Sint-Martens-Latem, BE

AG

LAF

LA

DT

PI

DS

W: MO 2004076433

A1 20040910

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
 CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
 IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
 MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM  
 TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
 RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
 RW (EAP): AM AZ BY KG KZ MD RU TJ TM  
 RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC  
 NL PT SE SI SK TR  
 RW (OAPI): BF BJ CF CG CI CM GN GQ GW ML MR NE SN TD TG  
 WO 2003-1B792 A 20030228

AI

ABEN

The present invention relates to novel inhibitors of serine  
 type peptidases  
 in general and of serine type dipeptidyl peptidases  
 in particular. The present  
 invention further relates to the use of the dipeptidyl  
 peptidase inhibitors  
 for selective inhibition of dipeptidyl peptidases.  
 The present invention also  
 relates to pharmaceutical compositions comprising these novel  
 dipeptidyl  
 peptidase inhibitors. The present invention further  
 relates to the use of the  
 novel inhibitors in therapy, diagnosis and research.  
 L'invention concerne de nouveaux inhibiteurs de peptidases de type  
 serine

ABFR

en general et de dipeptidyle peptidases de type serine en particulier.  
 L'invention concerne également l'utilisation des inhibiteurs  
 de dipeptidyle peptidases dans l'inhibition sélective de dipeptidyle  
 peptidases. L'invention concerne en outre des compositions  
 pharmaceutiques  
 comportant ces nouveaux inhibiteurs de dipeptidyle peptidases. Par  
 ailleurs,  
 la présente invention se rapporte à l'utilisation de ces nouveaux  
 inhibiteurs dans les domaines thérapeutique, diagnostique et de  
 recherche.

L22

AN

TI

IN

PA

PI

ANSWER 2 OF 6 PCTFULL COPYRIGHT 2006 Univentio on STN

200302595 PCTFULL ED 20030117 EW 200302

NEW DIPEPTIDYL PEPTIDASE IV INHIBITORS AND

THEIR USES AS ANTI-CANCER AGENTS

Allowance Search

NOUVEAUX INHIBITEURS DE DIPEPTIDYLPEPTIDASE IV ET LEURS UTILISATIONS EN  
 TANT QU'AGENTS ANTI-CANCEREUX  
 DEMUTH, Hans-Ulrich, Hegelstrasse 14, 06114 Halle/Saale, DE [DE, DE];  
 HOFMANN, Torsen, Koernerstrasse 8, 06114 Halle/Saale, DE [DE, DE];  
 VON HOERSTEN, Stephan, Birkenkamp 1, 30900 Wedemark, DE [DE, DE]  
 PROBIORUG AG, Weinbergweg 22, 06120 Halle/Saale, DE [DE, DE], for all  
 designates States except US;  
 DEMUTH, Hans-Ulrich, Hegelstrasse 14, 06114 Halle/Saale, DE [DE, DE],  
 for US only;  
 HOFMANN, Torsen, Koernerstrasse 8, 06114 Halle/Saale, DE [DE, DE], for  
 US only;  
 VON HOERSTEN, Stephan, Birkenkamp 1, 30900 Wedemark, DE [DE, DE], for US  
 only;  
 FORSTMEYER, Dietmar, Boeters & Bauer, Bereiteranger 15, 81541 Muenchen,  
 DE

AG

LAF

LA

DT

PI

DS

W: MO 2003002595

A2 20030109

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
 CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
 IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
 MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM  
 TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
 RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
 RW (EAP): AM AZ BY KG KZ MD RU TJ TM  
 RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
 BF BJ CF CG CI CM GN GQ GW ML MR NE SN TD TG  
 WO 2002-EP7129 A 20020627  
 EP 2001-01114796.4 20010627

AI

PRAI

DE 2001-101 50 203.6 20011012

DE 2001-101 54 689.0 20011109

US 2002-60/360,909 20020228

ABEN

The present invention provides new uses of DPPIV-inhibitors of  
 acceptable acid addition salt forms, for treating conditions mediated by  
 DPPIV or DPPIV-like enzymes, such as cancer and tumors. In a more  
 preferred embodiment, the compounds of the present invention are useful  
 for the treatment of metastasis and tumor colonization.

ABFR

La présente invention concerne de nouvelles utilisations d'inhibiteurs  
 de dipeptidylpeptidase IV (DPPIV) de la présente invention, et leurs sels  
 d'addition acides pharmaceutiquement acceptables correspondants, pour le  
 traitement de cas induits par la DPPIV ou par des enzymes du type DPPIV,  
 tels qu'un cancer et des tumeurs. Dans un mode de réalisation préféré,  
 les composés selon la présente invention sont utiles pour le traitement  
 de la colonisation de métastases et de tumeurs.

L22

AN

TI

IN

PA

PI

ANSWER 3 OF 6 USPATTFULL on STN

2006:46504 USPATTFULL

Sustained release preparation

AKIYAMA, Yoshiko, C/O TAKEDA PHARMACEUTICAL COMPANY LIMITED, 17-85,

JUSOHONMACHI 2-CHOME, YODOGAWA-KU OSAKA-SHI, OSAKA, JAPAN 532-8686

Matsumoto, Yukihiko, Osaka, JAPAN

Oz, Satoru, Osaka, JAPAN

Suzuki, Nobuhiko, Osaka, JAPAN

Tsubotani, Shigetoshi, Osaka, JAPAN

TAKEDA PHARMACEUTICAL COMPANY LIMITED, OSAKA, JAPAN, 541-0045 (non-U.S.

corporation)

US 2006039974 A1 20060223

Allowance Search

AI US 2003-526792 A1 20030910 (10)  
WO 2003-JP11570 20030910  
PRAI JP 2002-266054 20020911 PCT 371 date  
DT Utility  
FS APPLICATION  
LREP WENDEROTH, LIND & BONACK, L.L.P., 2033 K STREET N.W., SUITE 800,  
WASHINGTON, DC, 20006-1021, US  
CLMN Number of Claims: 20  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1580

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The sustained-release preparation of the present invention, which contains a dipeptidyl peptidase IV inhibitor and a hydrophilic polymer, can appropriately inhibit the DPP-IV activity, and is superior in convenience or compliance.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 4 OF 6 USPTAFULL on STN  
AN 2005:234091 USPTAFULL  
TI Novel effectors of dipeptidyl peptidase IV  
IN Demuth, Hans-Ulrich, Halle, GERMANY, FEDERAL REPUBLIC OF  
Glund, Konrad, Halle, GERMANY, FEDERAL REPUBLIC OF  
Schlenzig, Dagmar, Halle, GERMANY, FEDERAL REPUBLIC OF  
Kruher, Susanne, Halle, GERMANY, FEDERAL REPUBLIC OF  
PI US 2005203030 A1 20050915  
US 2003-727209 A1 20031202 (10)  
RLI Continuation of Ser. No. US 2003-361956, filed on 10 Feb 2003, ABANDONED  
Continuation of Ser. No. US 2000-723638, filed on 28 Nov 2000, GRANTED,  
Pat. No. US 6548481  
PRAI DE 1998-198 19980528  
DE 1999-EP3712 19990528  
DT Utility  
FS APPLICATION  
LREP BROWN, RUDNICK, BERLACK & ISRAELS, LLP., BOX 1P, 18TH FLOOR, ONE  
FINANCIAL CENTER, BOSTON, MA, 02111, US  
CLMN Number of Claims: 27  
ECL Exemplary Claim: 1-18  
DRWN 2 Drawing Page(s)  
LN.CNT 677

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Dipeptide compounds and compounds analogous to dipeptide compounds that are formed from an amino acid and a thiazolidine or pyrrolidine group, and salts thereof used in the treatment of impaired glucose tolerance, glycosuria, hyperlipidaemia, metabolic acidosis, diabetes mellitus, diabetic neuropathy and nephropathy and also of sequelae of diabetes mellitus in mammals.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 5 OF 6 USPTAFULL on STN  
AN 2005:196882 USPTAFULL  
TI Dipeptidyl peptidase IV inhibitors and  
their uses as anti-cancer agents  
IN von Hoersten, Stephan, Wedemark, GERMANY, FEDERAL REPUBLIC OF  
Demuth, Hans-Ulrich, Halle/Saale, GERMANY, FEDERAL REPUBLIC OF  
Hoffmann, Torsten, Halle/Saale, GERMANY, FEDERAL REPUBLIC OF

Allowance Search

PI US 2005171025 A1 20050804  
US 7109347 B2 20060919  
AI US 2005-93991 A1 20050330 (11)  
RLI Continuation of Ser. No. US 2002-172809, filed on 13 Jun 2002, PENDING  
PRAI EP 2001-114796 20010627  
DE 2001-150203 20011012  
DE 2001-154689 20011109  
US 2001-301158P 20010627 (60)  
US 2002-360909P 20020228 (60)  
DT Utility  
FS APPLICATION  
LREP BROWN, RUDNICK, BERLACK & ISRAELS, LLP., BOX 1P, 18TH FLOOR, ONE  
FINANCIAL CENTER, BOSTON, MA, 02111, US  
CLMN Number of Claims: 20  
ECL Exemplary Claim: 1  
DRWN 7 Drawing Page(s)  
LN.CNT 2625

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides new uses of DPP-IV-inhibitors of the present invention, and their corresponding pharmaceutically acceptable acid addition salt forms, for treating conditions mediated by DPP-IV or DPP-IV-like enzymes, such as cancer and tumors. In a more preferred embodiment, the compounds of the present invention are useful for the treatment of metastasis and tumor colonization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 6 OF 6 USPTAFULL on STN  
AN 2003:188406 USPTAFULL  
TI Dipeptidyl peptidase IV inhibitors and  
their uses as anti-cancer agents  
IN von Hoersten, Stephan, Wedemark, GERMANY, FEDERAL REPUBLIC OF  
Demuth, Hans-Ulrich, Halle/Saale, GERMANY, FEDERAL REPUBLIC OF  
Hoffmann, Torsten, Halle/Saale, GERMANY, FEDERAL REPUBLIC OF  
PI US 2003130199 A1 20030710  
US 2002-172809 A1 20020613 (10)  
PRAI EP 2001-114796 20010627  
DE 2001-150203 20011012  
DE 2001-154689 20011109  
US 2001-301158P 20010627 (60)  
US 2002-360909P 20020228 (60)  
DT Utility  
FS APPLICATION

LREP Mark A. Hofer, Brown Rudnick Berlack Israels, LLP, One Financial Center,  
Boston, MA, 02111  
CLMN Number of Claims: 20  
ECL Exemplary Claim: 1  
DRWN 7 Drawing Page(s)  
LN.CNT 2714

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides new uses of DPP-IV-inhibitors of the present invention, and their corresponding pharmaceutically acceptable acid addition salt forms, for treating conditions mediated by DPP-IV or DPP-IV-like enzymes, such as cancer and tumors. In a more preferred embodiment, the compounds of the present invention are useful for the treatment of metastasis and tumor colonization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Allowance Search

10/735,582 01 October 2006 Primary Examiner Dell Chism

-> d his

(FILE 'HOME' ENTERED AT 00:16:49 ON 02 OCT 2006)

FILE 'REGISTRY' ENTERED AT 00:18:50 ON 02 OCT 2006

FILE 'CAPLUS, BIOSIS, SCISEARCH, MEDLINE, EMBAL, EMBASE' ENTERED AT 00:19:43 ON 02 OCT 2006

L1 0 S Isoleucyl Adj Thiazolidine  
L2 15 S Isoleucyl Thiazolidine  
L3 2 S Isoleucyl Pyrrolidine  
L4 0 S Allo Isoleucyl Thiazolidine  
L5 0 S Allo Isoleucyl Pyrrolidine  
L6 0 S Valyl Thiazolidine  
L7 11 S Valyl Pyrrolidine  
L8 0 S L2 AND L3 AND L7  
L9 15 S L2 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR  
L10 0 S L3 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR  
L11 0 S L7 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR  
L12 8 DUP REMO L9 (7 DUPLICATES REMOVED)

FILE 'PCTFULL, USPATFULL, USPAT2' ENTERED AT 00:25:18 ON 02 OCT 2006

L13 80 S L2  
L14 79 S L3  
L15 44 S L7  
L16 74 S L13 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR  
L17 71 S L14 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR  
L18 17 S L15 AND DIPEPTIDYL PEPTIDASE AND INHIBITOR  
L19 69 DUP REMO L16 (5 DUPLICATES REMOVED)  
L20 65 DUP REMO L17 (6 DUPLICATES REMOVED)  
L21 16 DUP REMO L18 (1 DUPLICATE REMOVED)  
L22 6 S L19 AND L20 AND L21

Allowance Search